

Date: Tuesday, 1/3/2006 4:14:52 PM  
 User: Kimi Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SADDLE BILLET
Job Number : 25348	
Estimate Number : 10033	
P.O. Number : N/A	Part Number : D6101003
This Issue : 1/3/2006 S.O. No. : N/A	Drawing Number : D6101 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : MACHINED PARTS	Drawing Revision : A
Previous Run : 25347	Material : N/A
Written By : <u>SEE COMMENT BELOW</u>	Due Date : 7/15/2006 Qty: 100 Um: Each
Checked & Approved By : <u>SEE ABOVE USER &amp; DATE</u>	
Comment : Est. A: 01.05.04 New Issue EC	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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## Comment: PURCHASING

Issue P/O: 00000339 *HP 06/01/04*

a) Description: Alluminum billet

b) 7.875" x 6.250" x 2.00" thick

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Grain direction along 7.875" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

2.0	PACKAGING 1	PACKAGING RESOURCE #1
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## Comment: PACKAGING RESOURCE #1

Receive &amp; Inspect For Transit Damage

Ensure material certification is attached

*06/4/18 100*

3.0	QC6	DIMENSIONAL CHECK
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## Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

*TSC 06.04.24 100*

4.0	PACKAGING 1	PACKAGING RESOURCE #1
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## Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: CNC
*TSC 06.04.24 100*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/04/24  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/3/2006 4:14:52 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 25348

Part Number: D6101003

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

*S* 06/04/24 (100)

Job Completion



*U* 06/04/24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

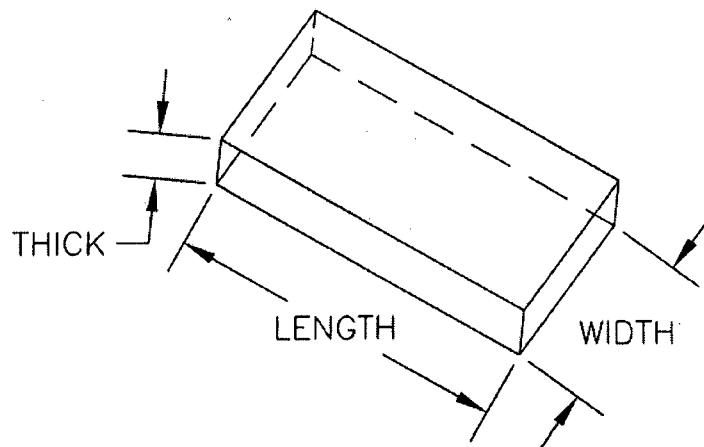
NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>S</i>	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

## SPECIFICATION CONTROL DRAWING

RELEASED  
01.04.23 *CP*



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x NOTICE  
WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-006	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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03-20-06 08:42 FROM-

T-014 P002/008 F-019

**KAISER  
ALUMINUM**

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

**CERTIFIED TEST REPORT**

Serial Number

4062402

Lot: 358365A5 Cast 877 Drop 58 Ingot 1

Tensile:	Temper T7351	Dir / # Tests LT / 2 (Min:Max)	Ultimate KSI (MPA) 73.4 : 74.3 (506 : 512)	Yield KSI (MPA) 62.8 : 63.6 (433 : 439)	Elongation % 10.8 : 11.8
		Conductivity %IACS : (MS/M) :	39.8 Min 23.1 Min	40.3 Max 23.4 Max	

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.11	0.25	1.51	0.05	2.48	0.19	5.57	0.03	0.01	0.01	TOT 0.04

**ALLOY LIMITS**

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

**TEST NOTES**

Metal represented by this test report was immersion  
ultrasonically tested from one side and meets the Class A  
and Class B requirements of all specifications referenced  
on this test report.

**CERTIFICATION**

KAISER ALUMINUM & CHEMICAL CORPORATION (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM & CHEMICAL CORPORATION LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



Page 2 of 2

03-20-06 08:42 FROM-

T-014 P001/008 F-019

## SHIP TO:

A M CASTLE & CO  
3400 NO. WOLF ROAD  
FRANKLIN PARK, IL 60131

# KAISER

## ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number

4062402

## SOLD TO:

AM CASTLE & CO  
3400 NO. WOLF ROAD  
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 01-81959		WORK PACKAGE:	CUSTOMER PART NUMBER: 6857		SHIP RUN/LOAD ID: 100622/17	GOV'T CONTRACT NUMBER: A97075-80
KAISER ORDER NO: 1032384	LINE ITEM: 1	SHIP DATE: 16-MAR-2006	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	
WEIGHT SHIPPED: 7078 LB	QUANTITY: 5 PCS EST.	B/L NUMBER: 207775	GAUGE: 2.0000 IN	WIDTH: 48.500 IN	LENGTH: 144.500 IN	

## Certified Specifications

AMS 4078/RevF  
ASTM B 209/Rev04  
BSS 7055/RevA  
EAC MS1011/RevA  
MMS 159/RevN

AMS-CC-A-250/12  
ASTM B 594/Rev02  
CSTI 006/RevB  
GSS18100/RevG  
PS 21211/RevJ

AMS-STD-2154  
BAC 5439/RevH  
DPS 4.713/RevN/AmdAF  
MIL-STD-2154

Test Code: 4297

## Test Results

Lot: 356885A4 Cast 881

Drop 22

Ingot 2

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min;Max)	74.1 : 74.4 (511 : 519)	63.7 : 63.8 (439 : 440)	11.0 : 11.7

Conductivity %IACS :	40.0 Min	40.4 Max
(MS/M) :	23.2 Min	23.4 Max

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.23	1.42	0.05	2.50	0.19	5.66	0.02	0.01	0.01	TOT 0.01

CASTLE METALS FP  
DATE REC'D 3.20.06 AC 6857  
APPROVED BY: *[Signature]*

1. REQUISITION CLIENT-CUSTOMER REQUISITION NO.		NO. COM. CLIENT-CUST. ORD. NO.		COMPTÉ-ACCT.	VEND.-SLS	TERR.	EXPÉDIE PAR-SHIP VIA		
		FD 00000337		91037	200	40	CARANO (PPD)		
HETEUR-PURCHASING AGENT		TELEPHONE	H/C	TAXE	NO. COM ORD	REGION LIVRAISON-DEL ZONE		F.A.B.-F.O.B.	BILL
LINDA LACELLE		613 682-3336	9	0	1	C/C		PREPAID	
/RE A-SHIP TO:		VENDU A-SOLD TO:				INFORMATION CRÉDIT-CREDIT INFORMATION			ROUTE
		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY ON K6A 1K7				REC SEE FRANCE STATUS			01-NL-03/3 30-NL-04/1 31-NL-04/1
INSTRUCTIONS/LIVRAISON-DELIVERY		INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)				INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)			
IND-L26184									

SCRIPTION - ITEM 1		QTE/UNITE COM.-ORDERED		PCES/PO COM-ORD	POIDS COM.-WT. ORDERED
2.0000 PLATE 7075-T7351 ALUM 6.25" X 7.875"		100 PCS		PCS	995
BLACK W/RED STRIPE		BALLOTS-BUNDLES		PCES/PO EXP. SHP.	POIDS EXP.-WT. SHIPPED
1		100		995	
FORME-SHAPE		I.A.C.			
6857					
29.08850F					
INSTRUCTIONS		COULÉE INFO-HEAT INFO		QTE-QTY	
TOL: +.030" / -.000"		358365 AS			
THICKNESS TOL: +.030" / -.000"					
GRAIN TO RUN ALONG 7.875"					
ATTN MARTINE PAS AVANT 14 AVR.					
PRIOR DIST/ORD: 01 584924					
INSTRUCTIONS (CONT'D.)		100 X 6.25" X 7.875"			
ENT.-WT.					

SCRIPTION - ITEM 2		QTE/UNITE COM.-ORDERED		PCES/PO COM-ORD	POIDS COM.-WT. ORDERED
		BALLOTS-BUNDLES		PCES/PO EXP. SHP.	POIDS EXP.-WT. SHIPPED
		FORME-SHAPE		I.A.C.	
INSTRUCTIONS		COULÉE INFO-HEAT INFO		QTE-QTY	
1 Box					
INSTRUCTIONS (CONT'D.)					
ENT.-WT.					

SCRIPTION - ITEM 3		QTE/UNITE COM.-ORDERED		PCES/PO COM-ORD	POIDS COM.-WT. ORDERED
		BALLOTS-BUNDLES		PCES/PO EXP. SHP.	POIDS EXP.-WT. SHIPPED
		FORME-SHAPE		I.A.C.	
INSTRUCTIONS		COULÉE INFO-HEAT INFO		QTE-QTY	
INSTRUCTIONS (CONT'D.)					
ENT.-WT.					